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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/107,787	06/30/1998	JOHN S. BUCHANAN	10000-1	8519
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Joseph C. Wang ExxonMobil Research and Engineering Company PO Box 900 Annandale, NJ 08801-0900			EXAMINER	
			BUSHEY, CHARLES S	
			ART UNIT	PAPER NUMBER
			1724	0.0
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Please find below and/or attached an Office communication concerning this application or proceeding.

U.S. Patent and Trademark Office PTO-326 (Rev. 04-01)

3) Information Disclosure Statement(s) (PTO-1449) Paper No(s)

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DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 11 and 12 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Sheinman (Figs. 1 and 2; col. 2, line 26 through col. 3, line 1).

Applicant should note that the liquid enters the cyclonic device from a tray located outside of the sidewalls of the device. The liquid collects on the tray until it reaches a level equal to the top end of the plenum or downcomer (7), at which time it flows downwardly through (7) to the lower end thereof wherein the liquid exits pipe (7) through the sidewall thereof near the bottom end of the cyclonic region. Applicant should also recognize that outlets (5) arranged in the sidewall of the cyclonic device are provided between the first set of spin devices (11) and the second set of spin devices (12), the second set of spin devices being arranged "substantially at

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the midpoint" of the cyclonic device and occupying about 15% of the elevation of the cyclonic device.

Applicant should note that the amended language of instant claim 11 is essentially equivalent to the language that has been replaced by the amendment. Specifically, claim 11 previously stated that the spin vanes were located "at about the midpoint" of the sidewall, while the amended language states that the spin vanes are located "substantially at the midpoint" of the sidewall. It is the Examiner's position that "substantially" is as broad as "about", especially when used to modify the term "midpoint", which as defined by the 10th Edition of Merriam Webster's Collegiate Dictionary as, "a point at <u>or near</u> the center or middle". Clearly since the term being modified (midpoint), by definition is not an exact term, a none exact modifier (either about or substantially) cannot be expected to provide such a pinpoint definition to overcome a reference teaching such as that provided by Sheinman.

Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later

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invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sheinman.

Sheinman (Figs. 1 and 2; col. 2, line 26 through col. 3, line 1) as has been applied above substantially disclose applicant's invention as recited by instant claims 11 and 12, except for the spin vanes being located precisely at the midpoint. While the Examiner does not agree that the instant claims require location of the spin vanes precisely at the center point between the ends of the sidewall of the device, it would have been obvious for an artisan at the time of the invention, to modify the location of the spin vanes (12) of Sheinman to be located at any location near to and including the precise center point between the ends of the sidewall of the device, since such would not appreciably modify the operation or purposeful function of the device. Applicant should note that the entire discussion as set forth in paragraph 2 above is incorporated herein by reference.

Response to Arguments

6. Applicant's arguments filed January 4, 2002 have been fully considered but they are not persuasive. Applicant's arguments have been fully discussed and rebutted in the rejection statements above.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott Bushey whose telephone number is (703) 308-3581. The examiner can normally be reached on Monday-Thursday 6:30AM-5:00PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A. Simmons can be reached on (703) 308-1972. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-7718 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Scott Bushey Primary Examiner Art Unit 1724

csb July 22, 2002

7.22-02